

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free. "Green" Device (Note 2)

Maximum Ratings

- Operating Junction Temperature Range: -65°C to +175°C
- Storage Temperature Range: -65°C to +175°C
- Maximum Thermal Resistance: 35°C/W Junction to Lead
- Maximum Thermal Resistance: 85°C/W Junction to Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
ES1A-L	ES1A	50V	35V	50V
ES1B-L	ES1B	100V	70V	100V
ES1D-L	ES1D	200V	140V	200V
ES1G-L	ES1G	400V	280V	400V
ES1J-L	ES1J	600V	420V	600V

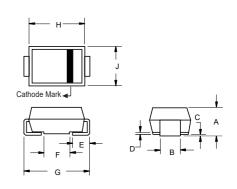
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I _{F(AV)}	1.0A	T _L =125°C
Peak Forward Surge Current	I _{FSM}	30A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage ES1A-L-ES1D-L ES1G-L ES1J-L	V _F	0.95V 1.25V 1.70V	I _{FM} =1.0A;
Maximum DC Reverse Current At Rated DC Blocking Voltage	I _R	1.0μA 80μA	T _J =25°C; T _J =125°C
Maximum Reverse Recovery Time	T _{RR}	35ns	I _F =0.5A; I _R =1.0A; Irr=0.25A
Typical Junction Capacitance ES1A-L-ES1D-L ES1G-L ES1J-L	С	18pF 12pF 10pF	Measured at 1.0MHz V _R =4.0V

Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7a.

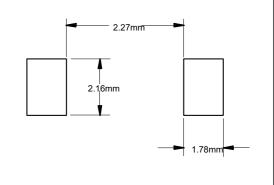
1 Amp Super Fast Recovery Rectifier 50 to 600 Volts

SMA (DO-214AC)



DIMENSIONS						
DIM	INCHES		MM		NOTE	
	MIN	MAX	MIN	MAX	NOTE	
Α	0.075	0.096	1.90	2.44		
В	0.050	0.064	1.27	1.63		
С	0.002	0.008	0.051	0.203		
D		0.020		0.51		
E	0.030	0.060	0.76	1.52		
F	0.065	0.091	1.65	2.32		
G	0.189	0.220	4.80	5.59		
Н	0.157	0.187	4.00	4.75		
J	0.090	0.115	2.25	2.92		

SUGGESTED SOLDER PAD LAYOUT



^{2.} Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.



Curve Characteristics

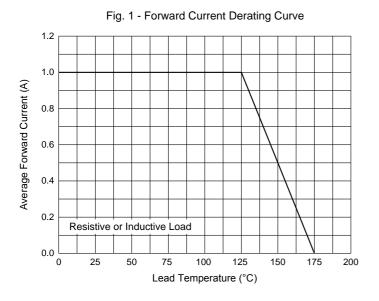


Fig. 3 - Typical Instantaneous Forward Characteristics 50 20 Instantaneous Forward Current (A) ES1A-L-ES1D-L 2 ES1G-L 0.2 0.05 T_J=25°C 0.02 0.01 0.5 1.5 2.0 2.5 3.0 Instantaneous Forward Voltage (V)

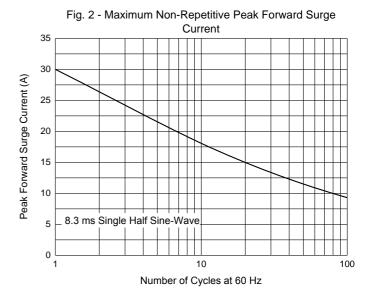
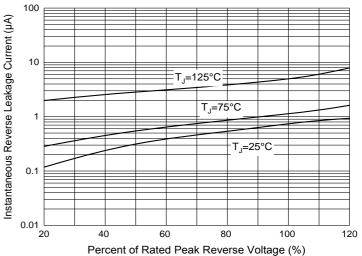


Fig. 4 - Typical Reverse Leakage Characteristics





Ordering Information

Device	Packing	
ES1A-LTP~ES1J-LTP	Tape&Reel: 5Kpcs/Reel	

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